

it may be communicated to others. But in such cases the course and spread of the disease will be very different from those in which it is produced by the general epidemic cause. D. F. C.

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ART. XXI.—*The History of the Cholera in Exeter in 1832.* By THOMAS SHAPTER, M. D., Physician to the Devon and Exeter Hospital, the St. Thomas Hospital, near Exeter, for Lunatics, the Lying-in-Charity, &c. &c. London, 1849: 8vo. pp. 297.

WERE we to judge of the character of the present work by its title, we should be greatly deceived. The physician, at least, would expect to find a professed history of the cholera in any given locality, and devoted mainly to the circumstances under which the disease occurred—the classes of the community among which it prevailed to the greatest extent, and with the most virulence—its pathological history, and the plans of treatment found most successful in arresting its fatal progress. The work of Dr. Shapter, however, is made up chiefly of a very minute account of the measures pursued by the authorities and inhabitants of Exeter, and its vicinity, to prevent the occurrence of the disease in their midst, previously to its visitation, and to moderate its violence, and prevent its spread, after its appearance. Upon many of the particulars connected with the medical history of cholera, it is true, the work contains much useful information; but this occupies but a small portion of it compared with that devoted to rather tiresome details of the measures pursued to improve the sanitary condition of the poor of Exeter, and of the city generally—without any very satisfactory attempt being made to determine how far these measures were successful in the prevention of the disease, or in disarming it of its malignancy. The author does not himself appear to be certain that his “History of the Cholera in Exeter” will prove to be one of general interest.

“It will probably appear,” he remarks, “that some portions of the following pages are redundant and burthensome; such as the resolutions and proceedings of the public bodies, the names of persons, the various handbills which were then issued, &c.; at this early period they may perhaps be so, but in recording them, I not only looked to give a full and accurate history of the time, but likewise kept in view that future period, when a change of habits and circumstances may give them point and interest.” “I cannot but feel that, had there been preserved similar documents of the plagues which, in old times, have passed over Exeter, and of which there are now only a few index notices, they would form a record of the greatest interest; nor can it fail to be perceived that that with which we regard the plagues of Athens, Milan, Marseilles, and London, is solely derived from the authentic details which have been preserved of them.”

Most of the sanitary measures pursued by the local Board of Health of Exeter, after its establishment, were unquestionably of a very judicious character; and, considering the difficulties experienced in carrying them into effect, originating in the fears and prejudices of the very portion of the populace who were to derive from them the greatest advantage, the board deserve great credit for their firmness and perseverance. Some of the measures adopted, were founded upon an idea of the extremely contagious character of cholera, and which, while they were unnecessary in themselves, were positively mischievous by their tendency to increase the prevalence and mortality of the disease, by augmenting the fears and depressing the courage of the inhabitants. Such were the enveloping of the bodies of those who died of cholera, in pitched cloths—their interment in especial cholera burial-grounds—the burning of tar barrels in the streets to purify the air—the profuse employment everywhere of various doubtful disinfectants; to such an extent, indeed, that the author remarks:—

“The whole air was in fact poisoned with the injudicious use of what were considered to be disinfectants; and it was not an uncommon complaint, that the smell of all these things was worse than the cholera smell itself.” “At the burial of the last body in the Bartholomew yard, the officiating clergyman, on its completion, desired the undertaker to hold out his hand for a something which

would prevent contagion; seeing a small bottle, he thought to have received some brandy, or other spirit, but was sickened by a highly-flavoured scent being given him."

Lime was profusely scattered about the streets, so that some of them were literally white with it. The clothing, beds, bedsteads, and bedding of those who died of cholera, were conveyed to a remote spot and burned, or were buried in pits with quicklime, by men with their mouths and nostrils muffled to prevent their inhaling the contagion emitted by them.

When those attacked by the disease refused to be removed to the cholera hospitals, "a conspicuous mark ('sick') was placed in front of the house, to warn persons that it is in quarantine;" and even when persons with the disease were removed, and the house had been purified, the word "*caution*" was substituted, "as denoting suspicion of the disease," and the inhabitants of such house were not at liberty to move out, or communicate with other persons, until, by the authority of the Local Board, the mark was removed.

The baneful influence of such unwise proceedings on the part of the public authorities, upon the minds of a certainly not very enlightened community, particularly when we consider the popular excitement which is always induced by the occurrence of any fearful epidemic, is not at all surprising—and hence we were prepared for the statement made by Dr. Shapter, that, upon the "bursting forth" of the cholera in the city of Exeter, the existence of the disease was denied; "the medical attendants ministering to its necessities were accused of inducing the unknown symptoms, and even of being the murderers of the people; drunkenness prevailed; derisive, blasphemous, and wanton songs were sung; rioting, and opposition to the enactments of the law took place, calling for the interference of its officers, and the warnings of the judge from the bench; then, as the disease progressed, the people became appalled, and, repenting, appealed, by public humiliation and prayer, to the Great Disposer of all events to stay the pestilence." "The profligacy and drunkenness of the lower orders increased to such an alarming extent as to become a matter of public remark and censure. Much of this vice was induced, not only by the general excitement prevailing, but by an idea that brandy was a preventive and panacea for the cholera; and amongst the lower orders nothing was undertaken without previously resorting to it."

Most of the objectionable measures adopted by the Board of Health of Exeter were, as we have remarked, based upon the supposition that the cholera was a highly contagious disease. Dr. Shapter, nevertheless, admits that no facts were developed during the occurrence of the disease in that city, which clearly proved its communicability by a contagious miasm emanating from the bodies of the sick. After summing up in general terms the arguments adduced in favour of and against the contagious character of the cholera, as it prevailed in Exeter and its vicinity, he remarks:—

"The conclusion to which, after a full consideration of the controversy, I have myself arrived, is, that the Asiatic cholera is essentially an epidemic, originating in, and chiefly due to, aerial influences, but capable, under peculiar and rare conditions, of being transmitted from man to man."

The epidemic commenced at Exeter on the 19th of July, and ceased on the 27th of October, 1832; during which time 1,135 cases occurred, of which number 402 died, while the deaths from all other diseases amounted to 142. The entire population of Exeter in 1832 was nearly 27,000.

"The official reports of the new cases show that, after the breaking out of the disease, it did not immediately, *i.e.* during the first week, diffuse itself to any great extent; a few cases, only, daily occurring; but that, from this time to the completion of the next fortnight, *i.e.* on the twentieth day from its first commencement, it rose rapidly and continuously to its height, then gradually subsided, and in about a month afterwards had, as a prevailing epidemic, passed away. An impression generally entertained at the time was, that the malignity of the disease, as it numerically declined, also diminished, and that the ratio of recoveries to deaths was much increased. This does not, however, appear to be the fact."

Dr. Shapter here presents a table of all the deaths that occurred between

the 19th of July and the 19th of October, specifying those which ensued from cholera, and those from other diseases; and then adds:—

“From a comparison, at any one time, of the sum of the mortality from cholera, which really took place as above set forth, with a sum of the new cases, we find that its rate ranged throughout about 35 per cent., and that the variations in this are so slight as to induce to the conclusion that the relative proportion of deaths to cases continued much the same at all times of the disease.” “Upon the gross population of the city, the mortality from cholera was 1.42 per cent.”

“When the deaths resulting from cholera at each period of life are compared with the numbers living at the same period (and which is the only true mode of arriving at a sound deduction on this point), it will be seen that during infancy its ratio is rather above that which takes place between the ages of ten and thirty-five, when the deaths are by no means numerous, and that, after the age of thirty-five, there is a considerable increase in the relative amount of mortality, but that its greatest proportionate amount takes place after sixty-five years of age.”

The influence of sex upon the course and progress of the disease does not appear to be very considerable. A table is given, in which the relative intensity and proportion of the duration of the disease, and of death proceeding from it, are contrasted, from which it would appear that males are rather more obnoxious to its influence than females, a rather larger proportion of these having died (1.54 per cent. males, and 1.33 per cent. females), and at a somewhat earlier period of the attack.

“From the above, it may therefore be generally concluded, that neither age nor sex appears to exert any very great influence upon the duration or virulence of the disease; irrespective of these its course is rapid and almost ephemeral. Unlike most epidemics, which exclusively single out for their victims persons at particular periods of life, it is, in fact, a general disease, and obeys, in the proportional amount of its mortality, the ordinary laws which govern the mortality of mankind, but then this mortality is crowded into a narrow and conspicuous space.

“The various occupations of life did not in any particular way predispose to the disease; those who died belonged to no exclusive calling; on the contrary, they were chiefly persons who had no very settled business, whose habits were irregular, and whose bodily comforts were badly provided for.

“The occurrence of cholera, though much influenced by the climate of season, has been for the most part so little influenced by that peculiar to different localities, that any particular account of the climate of this city need not be entered into. It will be sufficient to say, that immediately preceding and during the time the cholera prevailed, the weather was for the most part clear and fine, and such as produced the fruits and vegetables of the season in the greatest perfection and abundance. June and July were peculiarly fine months; the 19th of July, the day on which the cholera set in, was clear and fine, and the barometer stood above thirty inches, with a north wind varying to the eastward; the same character of weather continued till the latter end of August, when some rainy days, with a few thunder-storms, occurred. During the early part of this month, however, the currents of air which had been coming from the south gradually changed, and proceeded from the east, with a falling barometer. In September, though the wind was variable, the barometer regained its height, and the weather continued fine.”

Dr. Shapter remarks that the disease in Exeter “chiefly prevailed in crowded and ill-drained places, and in such only was there a large mortality;” and adds, “We must, therefore, consider these social errors as the chief predisposing causes of the disease, and that to them its difficulties and excessive mortality are mainly to be referred. Doubtless, in some cases, previous bad health, over anxiety, or unusual fatigue, may somewhat have had their influence, but, seeing that whole classes of the community were exempted from its attacks, not to any very great extent. From what occurred in this city, I feel justified in asserting the Asiatic cholera to be an epidemic rendered general and fatal by external circumstances; and that without these, it is, comparatively speaking, a manageable, if not a preventable, disease.

In regard to the duration of the disease as it occurred in Exeter, Dr. Shapter remarks that "the natural course of an attack occupied but a short period (from one to four days), and that, when death supervened, it usually took place early in this period."

"A careful examination of the official returns shows that, in those cases which terminated fatally, death usually ensued between the eighteenth and forty-eighth hours after the first attack; more than seventy-two (72.48) per cent. having died before the expiration of this latter hour, and nearly forty (39.68) per cent. before the expiration of the twenty-fourth hour; in some few cases (5.66 per cent.), death took place as early as twelve hours, and in one case in four hours after the first attack. The few remaining deaths (27.44 per cent.) were spread over, comparatively speaking, a prolonged period of time. It may therefore be stated, as a general fact, that the Asiatic cholera is a disease which runs its course in a few hours; that, if fatal, it is chiefly so within forty-eight hours; and that, if death do not supervene before the expiration of this time, the tendency to recovery is so great as rarely to be interrupted."

In the thirteenth chapter, which is the only one devoted to the strictly medical history of the disease, we are presented with a very excellent description of cholera, and some speculations in relation to its "proximate cause," the general conclusion from which is,

"That the Asiatic or pestilential cholera, consists essentially of a congestive collapse consequent on disordered action in the great sympathetic system of nerves. The exact nature of this disordered action is difficult to define. We may, however, assume, on the one hand, that it is rather of a general than of a specific nature, from its course not necessarily being certain or defined, but capable of being cut short from the first ingress of nervous feelings, and slight colliquative bowel disorder, to the commencement of, or during, the collapse; while, on the other, that it is of a depressing and stunning nature, both from its general characters, and from the class of remedies which, when properly applied on its first indications, invariably prevent the progress of the disease."

In regard to the treatment pursued by the physicians of Exeter, and its success, we quote the following remarks of Dr. Shapter:—

"On reviewing the various remedies used, it appears that, throughout, warm aromatics and carminatives were useful, with such medicines as are usually found beneficial in allaying irritation of the stomach, lime-water and milk may be particularly specified, together with those that calm nervous agitations. Mercury, freely used, both externally and internally, was attended with the greatest advantage; nor does its administration in large doses, though frequently repeated, appear to have been followed by any evil results. The evacuation of blood, either by leeches or by venesection, was useful in the early stages of the disease, and before collapse had completely set in, greatly relieving headache, vertigo, the violent pains in the bowels, and the cramps; but when collapse was fairly established its use was injurious; and, far from tending towards rallying from the collapse, apparently hastened the fatal result, though some of the notes even then speak both of its alleviating the headache and arresting the vomiting. The use of enémata of different materials, saline, aromatic, and turpentine, appears to have been frequently adopted; but, on the whole, the result of their employment is not encouraging. The general application of warmth, friction with the hand, or sinapisms, were frequent remedies, and often accompanied with advantage, but not by such decided effects as might have been expected from the coldness of the surface. The application of hot stimulants over the heart was attended in some cases with remarkable advantage. The saline treatment does not appear to have been very successful; nor, to any particular extent, was the administration of emetics, which always appeared to distress the patient. Transfusion was resorted to but in one case, and without success.

"I shall conclude this short summary of the treatment adopted, by the following abstract from a few notes made by myself at the time in answer to some inquiries then addressed to me. 'Judging from the reports daily given in the medical journals, I should suppose that less empiricism had been resorted to here than elsewhere. In the early stage, that is, when there were vomitings,

purging, and cramps, but before collapse was established, the following treatment was found of the utmost service; the constantly repeated exhibition of small doses of ammonia and ether combined with camphor julep, in the ordinary proportions, together with such small amount of opium as would act as a sedative on the stomach. This was followed up by calomel or blue pill in frequent doses. The formula and direction commonly adopted were somewhat of this kind: *R. Pilulæ hydrargyri gr. v; pulvis opii gr. ʒ. Misce et fiat pilula, omni semihora sumenda. R. Spiritus ætheris sulphurici compositi, spiritus ammoniæ aromatici, aa ʒij; liquoris opii sedativi mxxx; misturæ camphoræ ʒvj. Misce et sumat æger semiunciam frequentissime.*

"If the large tablespoonfuls of the above mixture were generally rejected, a teaspoonful every four or five minutes was administered; on sickness still continuing, the free application of mustard cataplasms, or other similar stimulating applications over the stomach, were then freely resorted to, together with the abstraction of blood, and apparently with the very best success. The above means promptly employed rarely failed in preventing the ingress of collapse. Should this, however, have set in, superadded to the above, the stimulating applications were freely and repeatedly applied to the limbs, together with frictions of mercurial ointment in combination with the spirit of turpentine, and the internal exhibition of such general stimulants as the feelings and judgment of the moment prompted. For the purpose of allaying the vomiting, the administration of lime-water and milk appeared to me, in one case, to be attended by marked benefit; and it has been tried by others, especially Dr. Blackall, with much good effect. The anxious desire for draughts of cold water was freely permitted, and proved grateful if not beneficial. I do not think the saline treatment, as propounded and administered by Dr. Stevens, has found many advocates; it has been resorted to, but certainly not with the results one was led to expect from his reports."

The work of Dr. Shapter, although it may add but little, if anything, to our knowledge in relation to the pathology and treatment of cholera, is, nevertheless, in many particulars, an interesting one. It is beautifully printed, and illustrated by a number of wood engravings, which for excellency of execution have seldom been exceeded. Our readers may probably be at a loss to understand how a work of the character of the present can admit of pictorial illustrations. These illustrations consist, chiefly, of views of different portions of the city of Exeter, as they appeared in 1832, and of incidents which occurred during the visitation of the cholera in that year. Their introduction does not appear to have entered into the original design of Dr. Shapter, in preparing the history before us. In relation to them he remarks:—

"The manuscript was in the hands of the printer, and the first four sheets were, as I believe it is technically termed, 'worked off,' when my friend, Mr. Gendall, most kindly and liberally placed at my disposal these illustrations of the period; and as they comprised interesting sketches of old parts of Exeter, my love for the ancient city induced me immediately to suspend the progress of my work, that I might avail myself of this opportunity of recording some of those places and customs which have since passed away: the progress of the last seventeen years in the destroying 'old Exeter,' is remarkable, and constitutes an era in its history."

D. F. C.

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ART. XXII.—*Remarks on the Construction of Obstetrical Forceps, with a Description of an Instrument employed by* JAMES P. WHITE, M.D., Professor of Obstetrics in the Medical Department of the University of Buffalo. (From the May No. of the "Buffalo Medical Journal.") Buffalo, 1849: 8vo. pp. 8.

PASSING over the very judicious remarks of Dr. White on the construction of obstetrical forceps generally, we shall simply present to our readers his description of the modifications in the construction of the instrument which he has suggested. So far as we are able to judge from the description and drawing given in the pamphlet before us, the forceps of Dr. White are in all respects